

SWITCHED CAPACITOR CIRCUIT CAPABLE OF MINIMIZING CLOCK FEEDTHROUGH EFFECT IN A VOLTAGE CONTROLLED OSCILLATOR CIRCUIT AND METHOD THEREOF

Abstract

A first switch element selectively connects a first node being connected to a capacitor to a second node according to a first control signal. A precharge circuit is connected to the first node for precharging the first node to a precharge voltage for a predetermined time period when the switched capacitor circuit is switched off. The precharge circuit includes a second switch element for selectively connecting a third node to the first node according to a second control signal; a precharge switch element for selectively connecting the precharge voltage to the third node according to the first control signal; and a delay unit for delaying the first control signal to generate the second control signal. In this way, the clock feedthrough effect is minimized and the capacitance of a varactor formed by the first switch element in the off-state is sta-

bilized during the VCO locking period.